UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/450,680	11/30/1999	MITSUJI MARUMO	35.G2504	8003

5514 7590 10/05/2004

FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER	
RAO, SHRINIVAS H	
ART UNIT	**PAPER NUMBER**
2814	

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/450,680	MARUMO, MITSUJI	
	Examiner	Art Unit	
	Steven H. Rao	2814	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 August 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *22-33 & 38-40* is/are pending in the application.

4a) Of the above claim(s) *38-40* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *22-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Response to Amendment

Applicants' amendment filed on July 20, 2004 has been forwarded to the examiner on August 02, 2004.

Therefore claims 22 and 25-33 as amended by the amendment and claims 23and 24 as previously recited are currently pending in the Application.

Claims 1-21 and 34 to 37 have been cancelled.

Claims 38-40 were withdrawn and are required to be cancelled for a complete response to this Final rejection (see below).

Election/Restrictions

This application contains claims 38-40 drawn to an invention nonelected without traverse in Paper No. March 22, 2002.

It is noted (as also stated in the Advisory Action) that the Examiner restricted the claims between method claims and devicel apparatus) claims on 10/04/2001 and Applicants' elected only device (apparatus claims) on 03/22/2002 and the prosecuted only device claims .

A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 21-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPR (Applicants' Admitted Prior Art) in view of Drake et al. (U. S. Patent No. 5,006,760, herein after Drake) .

With respect to claim 22, AAPR describes a pod attachable to an outside surface of an electromagnetic-shielded chamber which covers a device manufacturing apparatus, the device manufacturing apparatus importing a substrate from said pod, said pod comprising :

Walls (AAPR figure 10).

A lid for an opening defined by the walls , the substrate in said pod being imported to the device manufacturing apparatus through the opening

AAPR does not specifically mention an electromagnetic shield member provided by said walls.

However Drake in figures 1 and col. 2 lines 25-31 describes an electromagnetic shield to formed on outer surface that protects the wafer inside from electromagnetic radiation.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include Drake's pod including an electro magnetic shield in AAPR's device to form an outer surface that protects the wafer inside from electromagnetic radiation.

The other limitations of claim 22 are :

A lid for an opening defined by the walls, (AAPR figure 10, AAPR spec. page 2 lines 29 to page 3 line 12) the substrate in said pod being imported to the device manufacturing apparatus through the opening and wherein said walls comprise an electromagnetic shield member and a portion of said electromagnetic shield member is arranged on a part of said walls which contacts an electro-magnetic shielded chamber for processing the substrate (assuming the limitations are recited in proper non-product by process format - Drake figure 1 # 17, col. 2 lines 33- 35) ,

The limitations, "attachable to an outside surface of an electromagnetic – shielded chamber which covers a device covers a device manufacturing apparatus, the device manufacturing apparatus importing a substrate from said pod, said pod comprising " are recited only in the preamble of the claims and has not been given patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a structure (apparatus) and the portion of the claim following the preamble is self –contained description of the structure not depending for completeness upon the introductory clause.

Kropa V. Robie, 88 USPQ 478 (CCPA1951)

These limitations can also be said to be functional limitations eg. "the device manufacturing apparatus importing a substrate from said pod " which cannot be given patentable weight . See In re Fuller, 1929 C.D. 172, 388 O.G. 279.

The limitations, " attachable to an outside surface of an electromagnetic – shileded chamber which covers a device covers a device manufacturing apparatus, the device manufacturing apparatus importing a substrate from said pod, said pod

comprising " and " the substrate in said [pod being imported to the device manufacturing apparatus through the opening " and " a portion of said electromagnetic shield member is arranged on a part of said walls which contacts an electro-magnetic shielded chamber " are product by process limitations recited in a device claim and therefore cannot be given patentable weight .

It is well settled law that a product by process claim is directed to the product per se, no matter how actually made . See In re Fessman, 180 USPQ 324, 326 (CCPA 1974); In re Marosi et al. 218 USPQ 289, 292 (Fed. Cir 1983) all of which make it clear that it is the patentability of the final structure of the product gleaned from the process steps, which must be determined in a product by process claim, and not he patentability of the process. See Also MPEP 2113. More ever an old or obvious product produced by a new method is not a patentable product, whether claimed in " product by process" claims or not. .

With respect to claim 23, wherein said lid of said pod is arranged in front of the pod. (AAPR spec. pages 2 lines 29 to page 3 line 12)

With respect to claim 24 wherein said lid of said pod is arranged in a bottom of the pod. (AAPR spec. pages 2 lines 29 to page 3 line 12)

With respect to claim 25 wherein said electromagnetic shield comprises wire mesh arranged on or within walls of said pod. (AAPR spec. page 3 lines 21-22).

With respect to claim 26,34 wherein said electromagnetic shield comprises metal coatings arranged on walls of said pod. (AAPR spec. page 3 lines 17-18 , inherent instead of the shielded metal covering metal coating can be used).

With respect to claims 28 and 35, to the extent understood, AAPR describes a device manufacturing apparatus using a substrate comprising : an electromagnetic shielded chamber having an opening covered with a door; (AAPR figure 10) handling unit which imports the substrate into said electromagnetic-shielded chamber from a pod attached to an outside surface of said electromagnetic chamber (AAPR fig. 10 # 100, spec. page 1 line 24 to page 2 line 8) and a processing unit which performs a process using the substrate imported by said handling unit ; (APPR #s 6-11 and 39) and a stand for mounting a pod ,AAPR figure 10 # 12 etc.) wherein said electromagnetic shielded chamber has a grounded portion for contacting the pod. (Drake figure 1, col. 2 lines 33-35 , flange 17 contacts ground 26).

With respect to claim 29 wherein the apparatus has a ground portion arranged around a door of said electromagnetic 0shileded chamber through which the said handling unit imports the substrate . (Drake figure 1, col. 2 lines 33-35 , flange 17 contacts ground 26 and Drake fig. 1 # 13 touching 25).

With respect to claims 30 and 37 , wherein the process performed by said process unit is exposure of the substrate to a pattern . (AAPR spec. page 1 lines 16-17, process performed by said process unit is exposure of the substrate to a pattern is a product by process and therefore no patentable weight can be given).

With respect to claims 31 and 32, wherein the pods are front opening type and bottom opening type (AAPR page 3 lines 4 to 6) (AAPR page 2 lines 30-33).

B. Claims 27 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPR (Applicants' Admitted Prior Art) and Drake et al. (U.S. Patent No. 5,006,760, herein after Drake) as applied to claims 22-26 etc. above and further in view of Akagawa (U.S. Patent No. 4,856,904 herein after Akagawa) .

With respect to claims 27 and 35 wherein said electromagnetic shield comprises shielding materials provided in walls.of said pod.

AAPR and Drake do not specifically mention shielding materials provided in walls of the pod.

However, Akagwa fig.2 # 46, 47 and col.2 line 64 and col. 6 lines 64-68 describes shielding materials provided in walls of the pod to provide shield materials in intermetant unspecified locations to reduce the electromagnetic leakage and provide a lighter (less weight) shield.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include Akagwa's shielding materials provided in walls of the pod to provide shield materials in intermetant unspecified locations to reduce the electromagnetic leakage and provide a lighter (less weight) shield.

Response to Arguments

Applicant's arguments filed 08/02/2004 have been fully considered but they are not persuasive because as shown above all the presently recited limitations are taught by the applied prior art.

Applicants' by alleging that AAPR does not teach a pod attachable to an electromagnetic shielded chamber are engaging in impermissible piecemeal analysis (Se In re Keller (208 USPQ 871 (CCPA 1981).

It is noted that the applied secondary Drake reference teaches this claimed element and therefore it is not necessary for the primary)(AAPR reference) to also teach what has already agreed to by the Applicants' as being by the applied secondary Drake reference.

Further the recitation, "a pod attachable to an electromagnetic shielded chamber" I sonly recited in the preamble of the claim and not in the body of the claim and therefore need not be given patentable weight.

Applicants' second contention that the applied references do not teach , " walls (of a pod attachable to an electromagnetic –shielded chamber) comprising an electromagnetic shield chamber and a portion of the electromagnetic member is arranged on a part of the walls which contacts the electro-magnetic shielded chamber" is not persuasive because to the extent patentable weight can be given, as shown in the rejection above the applied prior teaches all of the limitations (for which patent able weight can be given) .

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Steven H. Rao whose telephone number is (703) 306-5945. The examiner can normally be reached on Monday- Friday from approximately 7:00 a.m. to 5:30 p.m.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0956. The Group facsimile number is (703) 308-7724.

Steven H. Rao
Patent Examiner
September 29, 2004.

LONG PHAM
PRIMARY EXAMINER